

Dulles Corridor Metrorail Project Phase 2 Update

**Loudoun County Board of Supervisors
Transportation & Land Use Committee**

June 19, 2015

**Charles W. Stark
Executive Project Director**

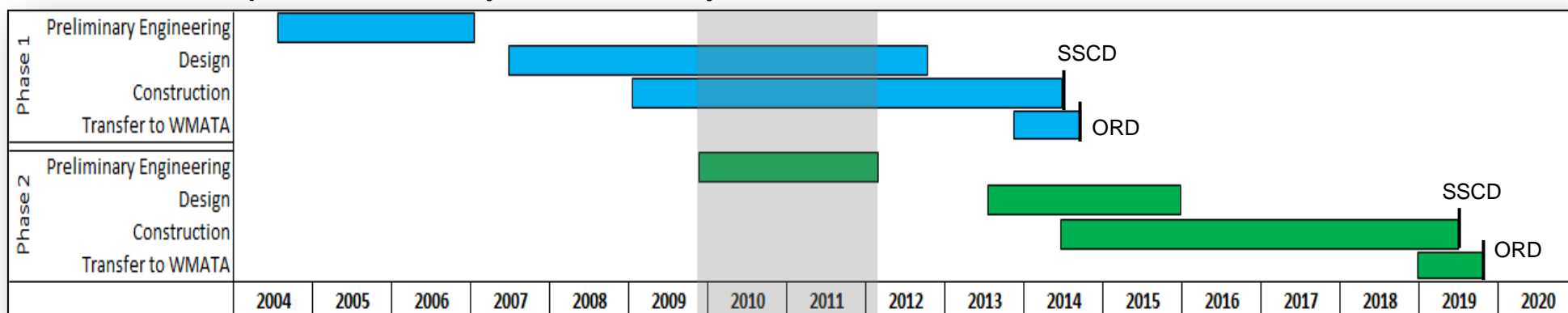


DULLES CORRIDOR
METRORAIL PROJECT



Phase 2 Status

- Substantial completion of the major Phase 2 contract (Package A) has been extended by 13 months to August 2019
- This is due to cumulative design changes
 - Consistency with Phase 1 late changes
 - Regulatory changes
 - Stakeholder requests
 - Improved safety & reliability



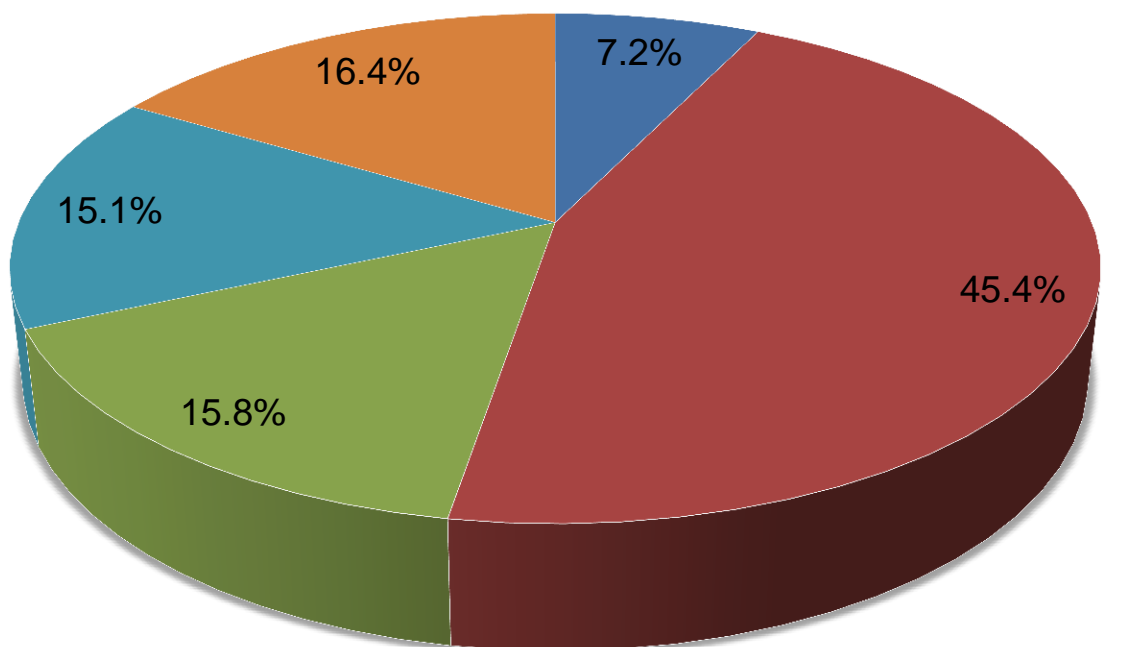
SSCD: Scheduled Substantial Completion Date
ORD: Operational Readiness Date

Phase 2 Preliminary Engineering completed prior to Phase 1 Completion



Phase 2 Schedule Extension

- Arises from 153 Individual Design Issues



■ Safety ■ Stakeholder Request ■ Regulatory ■ Utility ■ Other

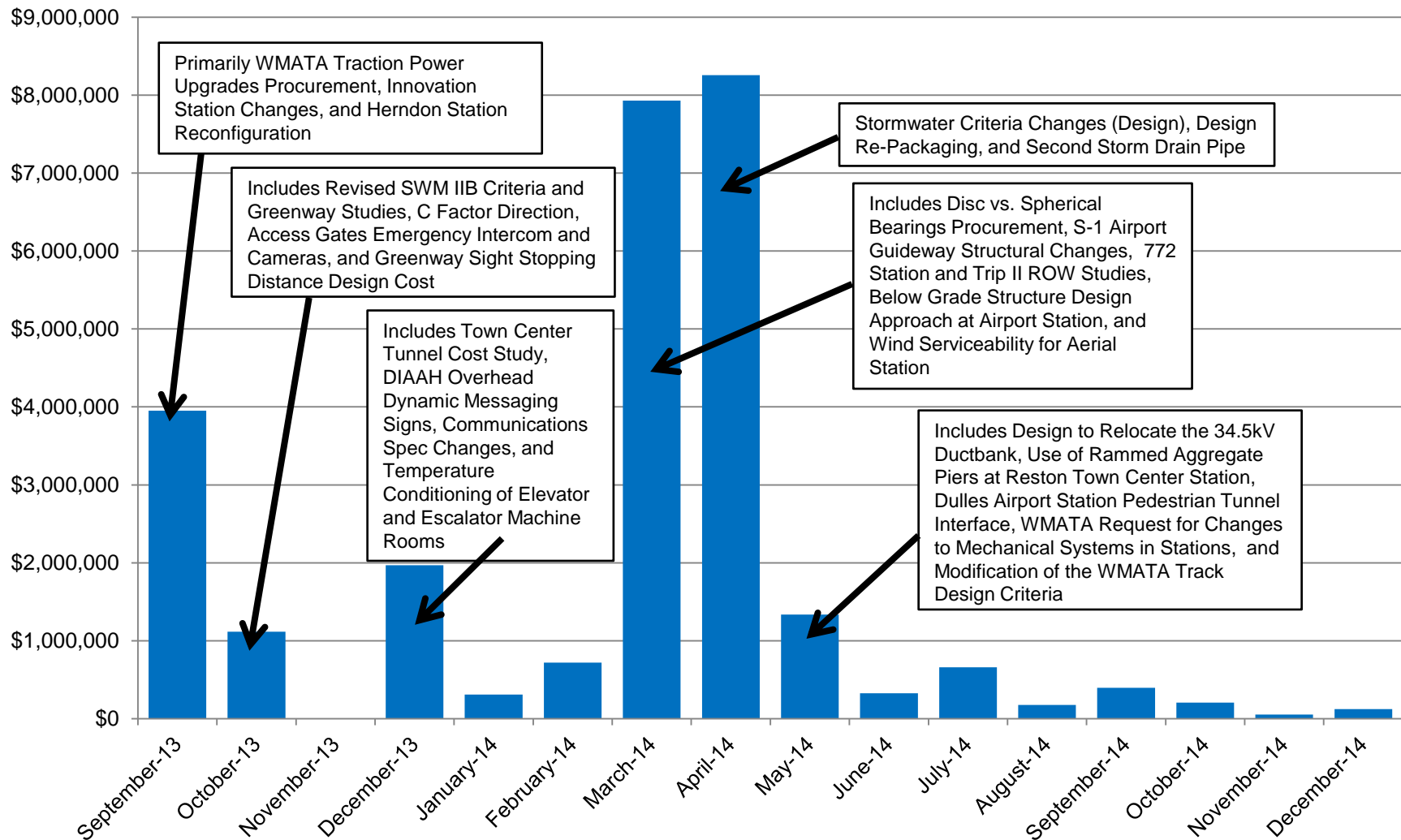
Phase 2 Schedule Extension

- **Extension Change Order**
 - Includes 13-month extension for all 153 changes
 - Includes contractor delay time only; costs arising from extension to be substantiated
 - Precludes any contractor constructive acceleration of work based on design changes
- **Costs of Extension**
 - Cost impact expected to be known end of 2015
- **Project has analyzed schedule impacts**
 - Major changes occurred in 2013 and early 2014

Phase 2 Schedule Extension

- Revised design work is time consuming
- Unforeseen design changes could result in an additional modification to the schedule
- Goal moving forward: minimize/stop further design changes

Concerted Effort to Reduce Design Changes has Succeeded



Stormwater Management

- In 2011, Virginia issued new stormwater regulations with an effective date of July 1, 2014.
- The 2011 regulations contained certain exemptions which would allow some construction projects to comply with the old stormwater regulations.
- In late 2013, MWAA decided that the Phase 2 Package A work should comply with the new Virginia stormwater requirements.

Stormwater Management

- This decision was based on a number of factors, including the following:
 - The risk that the Package A contractor would not be able to qualify for an exemption from the new regulations and that this would not be determined until early summer 2014, exposing the project to substantial delay and disruption.
 - The new regulations could benefit Phase 2, by allowing “credits” to be transferred between watersheds.
 - The majority of additional land needed under the new regulations would not need to be acquired from adjacent land owners.
 - A Phase 2 project which complied with the new regulations would be environmentally beneficial to the Chesapeake Bay and Loudoun, Fairfax and other Northern Virginia localities which, starting in July 2014, would also be applying the new regulations within their jurisdictions.

Stormwater Management

- In early 2014, MWAA directed the Phase 2 Package A contractor to begin re-designing the project to comply with the new Virginia stormwater regulations.
- This direction and the resulting re-design efforts by the contractor led to approximately one of the 13 months by which Phase 2 has been extended.



Phase 2 Main Alignment Design-Build Activities

Herndon Station

DIAAH median work for lane shifts, hand tunneling for utilities, and installation of 34.5 KV duct bank





Phase 2 Main Alignment Design-Build Activities

Innovation Center Station
Installation of 34.5 KV duct bank





Phase 2 Main Alignment Design-Build Activities

GSE Building

Rough grading area, and placement of sub-base stone for parking lot





Phase 2 Main Alignment Design-Build Activities

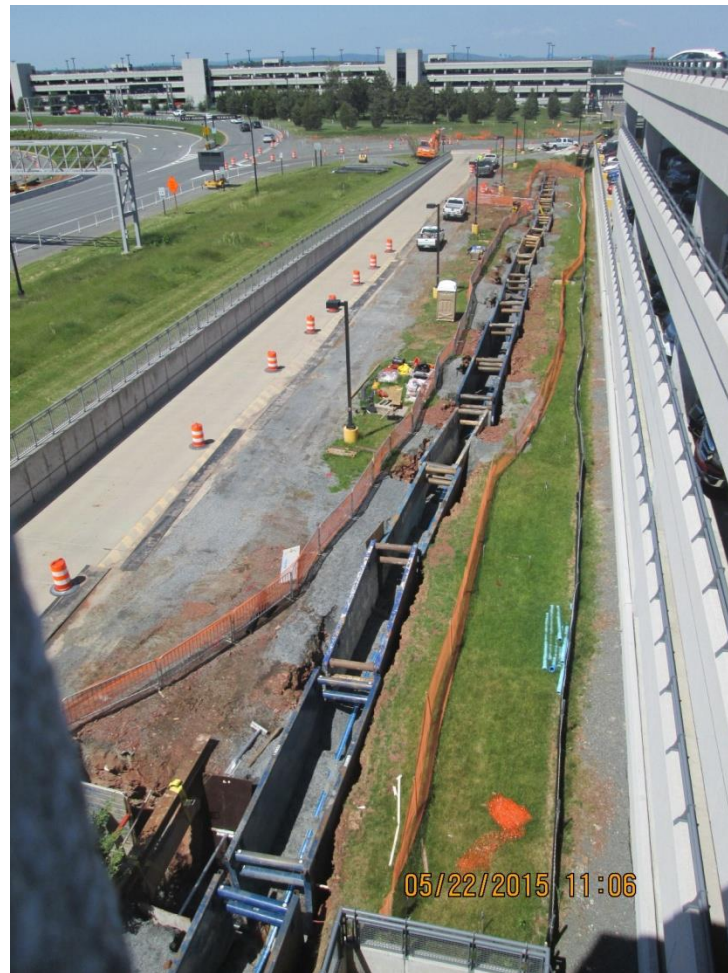
Horsepen Run Bridge
Floor plates installation for inbound and outbound bridges





Phase 2 Main Alignment Design-Build Activities

Airport Station
Water line installation





Phase 2 Main Alignment Design-Build Activities

Aerial Guideway

Pour drilled shafts, columns, and pier caps (On Airport and Yard Leads)





Phase 2 Main Alignment Design-Build Activities

34.5 KV duct bank and manhole installation along Rt. 28





Phase 2 Main Alignment Design-Build Activities

DIAAH median (East of Horsepen Run Bridge)
Cast-in-place track wall/retaining wall and storm
drainage





Phase 2 Main Alignment Design-Build Activities

Broad Run Bridge

Abutment median access preparation, supports of evacuation installation and abutment foundation work



Phase 2 Main Alignment Design-Build Activities

Upcoming

- Reston Station – Lane Shifts; small tunnels for utilities
- Herndon Station - Continue Lane Shifts; Small utility tunnels for Storm drainage
- Centerville Rd. Bridge - Install Supports of Excavation (SOE)
- Innovation Station - Resume small tunnels for utilities, mass excavation
- 34.5KV duct bank installation at Dulles Station
- Aerial Guideway - Pour drilled shafts, columns, and pier caps (on Airport and Yard Leads)

Phase 2

WMATA Rail Yard & Maintenance Facility

Design-Build Activities

Current

- Structures and Long Lead Items 90% design review
- Storm Water Management Plan review

Upcoming

- Site mobilization Issue for Permit (IFP) Package submission
- Early Civil IFP Package submission
- Final grading, Utilities and Yard layout 90% design submission
- Project wide 60% design submission



Ronald Reagan Washington National Airport



Dulles Corridor Metrorail Project



Dulles Toll Road



Washington Dulles International Airport



**METROPOLITAN WASHINGTON
AIRPORTS AUTHORITY**